Applicant : Greg Galazin et al.

Appln. No. : 10/800,953 Page -2-

1 age -2-

Amendments to the Specification:

Please replace paragraph [0006] with the following amended paragraph:

[0006] Heretofore, resilient bushings have been utilized within the pivotable connection between the beam and the associated hanger bracket. It is also known to use bushing bushings that have apertures extending along the length thereof to alter the spring-rate of the bushing along a particular path. Typically, these apertures are provided in pairs juxtaposed across the bushing. The bushing is then placed within the associated beam with the apertures vertically oriented, thereby altering the spring rate of the bushing for lateral shift of the trailer as compared to the spring rate for the bushing for roll of the trailer. In operation, these bushings are fixed with respect to the beams and pivot about pivot pins that are fixed with respect to the associated hanger brackets. However, these bushings can sometimes rotate with respect to the beam rather than the hanger bracket, thereby changing the orientation of the busing, and the orientation of the apertures located therein, and changing the direction in which the bushing affords a reduction in the spring-rate.

Please replace paragraph [0048] with the following amended paragraph:

[0048] The trailing arm 112 (Figs. 3-6) is a rigid, generally elongated member having a proximal end 15 and a distal end 17, and a longitudinal axis 34 (Fig. [[4]] 6). The proximal end 15 comprises a hollow cylindrical bushing sleeve 60 having a bushing aperture 68 and defining a central axis 36 orthogonal to the longitudinal axis 34. The distal end 17 comprises an air spring seat 64 and an axle seat 66 adapted for rigid connection of the axle 22, as described below. Intermediate the proximal end 15 and the distal end 17, the trailing arm 112 has an I-beam section 62 (Fig. 8) comprising a web 70, an upper beam flange 72, and a lower beam flange 74. The plane of the web 70 is generally orthogonal to the central axis 36 of the bushing aperture 68 and coplanar with the longitudinal axis 34 of the trailing arm 112.

Applicant : Greg Galazin et al.

Appln. No. : 10/800,953

Page -3-

Please replace paragraph [0049] with the following amended paragraph:

[0049] In the illustrated example, the upper flange 72 extends laterally an equal distance on either side of the web 70 and orthogonally thereto. However, the flange 72 can extend beyond the web 70 an unequal distance to accommodate the stresses in the flange, or due to other considerations such as providing clearance to accommodate other suspension components or the incorporation of mounting structures. As best illustrated in Fig. [[5]] §, the upper flange 72 varies in thickness along the length of the trailing arm 112 generally increasing in thickness from the bushing sleeve 60 to the air spring seat 64. The width of the upper flange 72 may also vary depending upon the variation in design stresses along the flange and the size of the trailing arm 112.

Please replace paragraph [0050] with the following amended paragraph:

[0050] The lower flange 74 of the illustrated example also extends laterally an equal distance on either side of the web 70 and orthogonally thereto, although the flange 74 can extend beyond the web 70 an unequal distance as discussed above. As best illustrated in Fig. 5, the lower flange [[84]] 74 varies in thickness along the trailing arm 112, generally increasing in thickness from the bushing sleeve 60 to the axle seat 66. The flange thickness will be dependent upon the variation in design stresses along the flange and the size of the trailing arm.

Please replace paragraph [0051] with the following amended paragraph:

[0051] The air spring seat 64 (Figs. 3-6, 9 and 11) is a generally platelike extension of the upper beam flange 72 and extends laterally beyond the upper flange 72 to provide a suitable seat for mounting and support of the air spring 24. The air spring seat 64 is integrally formed within the upper flange 72 extending above a lower portion [[50]] thereof and integrally connected via a bride portion 152 extending in a generally upwardly-inclined direction from the rear welding stud 82 and the air spring seat 64 is an air spring seat reinforcing flange 106, as shown in Figs. [[3]] 5. As shown in Figs. 4 and 6, the reinforcing flange 106 is a generally platelike structure with a width thickness approximately equal to that of the flanges 72, 74. The air spring seat reinforcing flange

Applicant : Greg Galazin et al. Appln. No. : 10/800,953

Page -4-

rage -4-

106 is integrally formed with the beam web 70 and preferably extends an equal distance laterally of the beam longitudinal axis 34. However, the flange 106 can extend beyond the axis 34 an unequal distance to accommodate the actual stresses to which the flange 106 will be subjected, or due to the other considerations such as providing clearance to accommodate other suspension components or the incorporation of other mounting structures. The air spring seat 64 is provided with a plurality of mounting apertures 154 for mounting the air spring 24 to the trailing arm 112 using conventional fasteners, such as bolted connections (not shown). In the illustrated example, the air spring 24 includes an upper plate 156, a lower plate 158, and a flexibly resilient boot 160 extending therebetween as is known in the art. During periods of operation, the supply of air pressure to the air spring 24 may be reduced or eliminated, thereby allowing the boot 160 to roll about the edges of the lower plate 158 and extend below the lower plate 158. The elevated position of the air spring seat 64 with respect to the rest of the upper beam flange 72 provides a clearance area between the boot 160 and the trailing arm 112, thereby reducing wear of the boot 160 and increasing the operating life thereof.

Please replace paragraph [0055] with the following amended paragraph:

[0055] As best illustrated in Fig. 13, the axle seat 66 engages the axle 22 so that the axle surface 23 is in contact with the axle saddle contact surface 90. A rear weld 79 extends around the perimeter of the welding stud 82 along the interface of the welding stud 82 and the axle surface 23. A front weld 78 extends in a similar manner around the perimeter of the welding stud 80 along the interface of the welding stud 80 and the axle surface 23. The axle 22 is rigidly connected to the beam 20 by the welds 78 and 79 that traverse the perimeter of each welding stud 80 and 82 respectively, along the interface of the welding studs 80 and 82 and the axle surface 23. With a curvature of the axle saddle 88 somewhat greater than the curvature of the axle 22, the top of the axle 22 is in contact with the axle saddle 88 at its junction with the axle saddle stiffening rib 96. This provides for vertical load transfer directly from the axle 22 to the beam [[20]] 112 without the vertical load being carried by the beam-to-axle welds.

Applicant : Greg Galazin et al. Appln. No. : 10/800,953

Page -5-

Please replace paragraph [0058] with the following amended paragraph:

[0058] The suspension assembly 10 further includes a pair of spacer assemblies 180 (Fig. 18) each operably coupled to an associated trailing arm 112. Each spacer assembly 180 includes a rearward support member 182, a forward support member [[184]] 185, a structural support member [[186]] 187, and a spacer member 188. In the illustrated example, each of the members 182, [[184]] 185, [[186]] 187 and 188 comprise a plate-like structure. The members 182, [[184]] 185 and [[186]] 187 are welded to the trailing arm 112 or attached by another acceptable method, or alternatively, may be integrally formed with trailing arm 112. If constructed as separate pieces, the members 182, [[184]] 185 and [[186]] 187 may be attached to the trailing arm 112 either prior to or after connecting the axle 22 with the trailing arm 112. The spacer 188 is fixedly attached to the rearward support member 182 and the forward support member [[184]] 185 subsequent to the axle 22 being attached to the trailing arm 112. The spacer member 188 is attached to the members 182 and 184 via welding, or other suitable method. Alternatively, the spacer member 188 may comprise a bolt, or other adjustable mechanism, that engages the support members 182 and [[184]] 185. During operation, the trailing arm 112 absorbs an upwardly directed force at the contact point between the axle 22 and trailing arm 112, a downwardly directed force exerted by the hanger bracket 18 and a downwardly directed force exerted by the air spring 24. The combination of these forces may cause a slight bending in the trailing arm 112 about the contact point between the axle 22 and the trailing arm 112, thereby reducing the width of the axle saddle 88 and placing significant stress on the welds 78 and 79. The spacer assembly 180 bridges the open end of the axle saddle 88, thereby preventing or limiting bending of the trailing arm 112 and reducing the fatigue associated therewith.

Please replace paragraph [0059] with the following amended paragraph:

[0059] As best illustrated in Fig. 16, the proximate end [[56]] <u>15</u> of each trailing arm 112 is provided with a plurality of bushing removal/insertion tool engagement surface <u>surfaces</u> 190 each extending radially outward from the bushing sleeve 60 in a

Applicant : Greg Galazin et al. Appln. No. : 10/800,953

Page -6-

. ago o

cantilevered manner. Each engagement surface 190 includes an aperture 192 extending therethrough for receiving a portion of the tool therein. The engagement surfaces 190 cooperate to increase the area available for engagement of the tool, as compared to a trailing arm that provides only an end surface of the bushing sleeve 60.